

**Abstract**

A process for forming an open cell alumina filter, the filter formed thereby and a method of filter using the filter. The process comprising the steps of forming a ceramic slurry comprising hydrated alumina, selected from bauxite and aluminum hydroxide, and ammonia stabilized colloidal silica. Voids are formed in the ceramic precursor slurry by an organic material to form a wet body. The wet body is heated to a temperature above a volatilisation temperature of the organic material but less than 1250°C to form a green ceramic. The green ceramic is heated to a temperature of less than 1250°C to form the open cell alumina filter. The alumina is  $\gamma$ -phase alumina.